

In the claims:

The following replaces any and all previously pending claims.

1. – 51. (Canceled)

52. (New) A modified human or humanized IgG1 comprising a modified hinge region containing an amino acid substitution at position cysteine 233 with either alanine, arginine, asparagine, aspartic acid, glutamic acid, glutamine, glycine, histidine, isoleucine, leucine, lysine, methionine, phenylalanine, proline, serine, threonine, tryptophan, tyrosine or valine, as numbered according to the EU index as in Kabat, said modified IgG1 exhibiting reduced degradation upon heating to 55°C for one week, as determined by mass spectrometry, as compared to a corresponding wild-type IgG1 not comprising said amino acid substitutions.

53. (New) A modified human or humanized IgG1 comprising a modified hinge region containing an amino acid substitution at position cysteine 239 with either alanine, arginine, asparagine, aspartic acid, glutamic acid, glutamine, glycine, histidine, isoleucine, leucine, lysine, methionine, phenylalanine, proline, serine, threonine, tryptophan, tyrosine or valine, as numbered according to the EU index as in Kabat, said modified IgG1 exhibiting reduced degradation upon heating to 55°C for one week, as determined by mass spectrometry, as compared to a corresponding wild-type IgG1 not comprising said amino acid substitutions.

54. (New) The modified IgG1 of claim 52, wherein said amino acid substitutions further comprise an amino acid substitution at position cysteine 239 with either alanine, arginine, asparagine, aspartic acid, glutamic acid, glutamine, glycine, histidine, isoleucine, leucine, lysine, methionine, phenylalanine, proline, serine, threonine, tryptophan, tyrosine or valine, as numbered according to the EU index as in Kabat.

55. (New) A modified human or humanized IgG1 comprising a modified hinge region containing an amino acid substitution at position aspartic acid 234 with either alanine, arginine, asparagine, cysteine, glutamic acid, glutamine, glycine, histidine,

isoleucine, leucine, lysine, methionine, phenylalanine, proline, serine, threonine, tryptophan, tyrosine or valine, as numbered according to the EU index as in Kabat, said modified IgG1 exhibiting reduced degradation upon heating to 55°C for one week, as determined by mass spectrometry, as compared to a corresponding wild-type IgG1 not comprising said amino acid substitutions.

56. (New) A modified human or humanized IgG1 comprising a modified hinge region containing an amino acid substitution at position lysine 235 with either alanine, arginine, asparagine, aspartic acid, cysteine, glutamic acid, glutamine, glycine, histidine, isoleucine, leucine, methionine, phenylalanine, proline, serine, threonine, tryptophan, tyrosine or valine, as numbered according to the EU index as in Kabat, said modified IgG1 exhibiting reduced degradation upon heating to 55°C for one week, as determined by mass spectrometry, as compared to a corresponding wild-type IgG1 not comprising said amino acid substitutions.

57. (New) A modified human or humanized IgG1 comprising a modified hinge region containing an amino acid substitution at position threonine 236 with either alanine, arginine, asparagine, aspartic acid, cysteine, glutamic acid, glutamine, glycine, histidine, isoleucine, leucine, methionine, phenylalanine, proline, serine, tryptophan, tyrosine or valine, as numbered according to the EU index as in Kabat, said modified IgG1 exhibiting reduced degradation upon heating to 55°C for one week, as determined by mass spectrometry, as compared to a corresponding wild-type IgG1 not comprising said amino acid substitutions.

58. (New) A modified human or humanized IgG1 comprising a modified hinge region containing an amino acid substitution at position threonine 239 with either alanine, arginine, asparagine, aspartic acid, cysteine, glutamic acid, glutamine, glycine, histidine, isoleucine, leucine, methionine, phenylalanine, proline, serine, tryptophan, tyrosine or valine, as numbered according to the EU index as in Kabat, said modified IgG1 exhibiting reduced degradation upon heating to 55°C for one week, as determined by mass spectrometry, as compared to a corresponding wild-type IgG1 not comprising said amino acid substitutions.

59. (New) The modified IgG1 of claim 57, wherein said amino acid substitution further comprise an amino acid substitution at position threonine 239 with either alanine, arginine, asparagine, aspartic acid, cysteine, glutamic acid, glutamine, glycine, histidine, isoleucine, leucine, methionine, phenylalanine, proline, serine, tryptophan, tyrosine or valine, as numbered according to the EU index as in Kabat.

60. (New) A modified human or humanized IgG1 comprising a modified hinge region containing an amino acid substitution at position histidine 237 with either alanine, arginine, asparagine, aspartic acid, cysteine, glutamic acid, glutamine, glycine, histidine, isoleucine, leucine, lysine, methionine, phenylalanine, proline, serine, threonine, tryptophan, tyrosine or valine, as numbered according to the EU index as in Kabat, said modified IgG1 exhibiting reduced degradation upon heating to 55°C for one week, as determined by mass spectrometry, as compared to a corresponding wild-type IgG1 not comprising said amino acid substitutions.

61. (New) The modified IgG1 of claim 60, wherein said amino acid substitution at position histidine 237 is a valine or isoleucine.

62. (New) A modified human or humanized IgG1 comprising a modified hinge region containing an amino acid substitution at position glycine 249 with either alanine, arginine, asparagine, aspartic acid, cysteine, glutamic acid, glutamine, histidine, isoleucine, leucine, lysine, methionine, phenylalanine, proline, serine, threonine, tryptophan, tyrosine, or valine, as numbered according to the EU index as in Kabat, said modified IgG1 exhibiting reduced degradation upon heating to 55°C for one week, as determined by mass spectrometry, as compared to a corresponding wild-type IgG1 not comprising said amino acid substitution.

63. (New) The modified IgG1 of claim 62, wherein said amino acid substitution at position glycine 249 is a valine or isoleucine.

64. (New) A modified human or humanized IgG4 comprising a modified hinge region containing an amino acid substitution at position serine 236 with proline, as numbered according to the EU index as in Kabat, said modified IgG4 exhibiting reduced

degradation upon heating to 55°C for one week, as determined by mass spectrometry, as compared to a corresponding wild-type IgG4 not comprising said amino acid substitution.

65. (New) A modified human or humanized IgG4 comprising a modified hinge region containing an amino acid substitution at position serine 241 with proline, as numbered according to the EU index as in Kabat, said modified IgG4 exhibiting reduced degradation upon heating to 55°C for one week, as determined by mass spectrometry, as compared to a corresponding wild-type IgG4 not comprising said amino acid substitution.